

Amendments to Claims

Claims 1-20 are pending in the application. Claims 17-20 are withdrawn from further consideration. Examiner has rejected claims 1-16. Please cancel claim 5 and amend claims 1 and 3, 4, and 6-16 and add new claims 21-24 as follows:

1. (Currently amended) A surgical drain for sensing a physiological property of tissue and draining fluid from a body comprising:

a) an elongated conduit configured to be implanted in a patient's body and rest against a first tissue and a second tissue within the body to drain fluid from ~~a body cavity~~ the patient's body, wherein the elongated conduit including ~~a first surface located on an outer side of the elongated conduit and a second surface located on an outer side of the elongated conduit that is substantially opposite of the first surface;~~ comprises a drain portion having openings spaced along substantially the length of the drain portion;

b) a first sensing ~~system~~ element configured to sense a physiological property of the first tissue ~~proximate to the first surface~~ adjacent to a first location of the elongated conduit; and

c) a second sensing ~~system~~ element configured to sense the same physiological property of the second tissue adjacent to a second location of the elongated conduit different than the first location. ~~proximate to the second surface.~~

2. (Original) The surgical drain of claim 1, wherein the physiological property is selected from the group comprising: temperature, oxygenation, perfusion, pH, NADH levels, biochemical composition, drug concentrations, turgidity or pressure.

3. (Currently amended) The surgical drain of claim 1, further including at least one transmitting element configured to deliver energy to the first tissue

and the second tissue located proximate to the first and second surface locations.

4. (Currently amended) The surgical drain of claim 1, comprising a third sensing ~~system~~ element configured to sense a second physiological property of tissue proximate to the conduit that is different from the physiological property sensed by the first and second sensing ~~systems~~ elements.

5. (Cancelled).

6. (Currently amended) The surgical drain of claim 1, wherein at least portions of the first and second sensing ~~systems~~ elements are embedded within the conduit behind material that is optically transparent.

7. (Currently amended) The surgical drain of claim 1, further including a processing system in communication with the first and second sensing ~~systems~~ elements configured to compare a difference between the physiological property sensed by the first and second sensing ~~systems~~ elements.

8. (Currently amended) The surgical drain of claim 7, wherein the sensing ~~systems~~ elements sense ~~temperature~~ oxygenation and wherein the processing system is configured to compare the difference between the ~~temperature~~ oxygenation sensed by the first and second sensing ~~systems~~ elements.

9. (Currently amended) The surgical drain of claim 4 7, wherein said processing system further including a display configured to depict data corresponding to the physiological property sensed by the first or second sensing ~~systems~~ elements.

10. (Currently amended) The surgical drain of claim 1, wherein the conduit further comprises ~~includes a third surface located on an outer side of the conduit substantially opposite of the third surface and further including:~~ a third sensing ~~system~~ element configured to sense the same physiological property of

tissue ~~proximate to the third surface proximate to the first surface~~ adjacent to a third location of the elongated conduit different from the first and second locations; and a fourth sensing ~~system element~~ configured to sense the same physiological property of tissue adjacent to a fourth location of the elongated conduit different from the first, second and third locations proximate to the fourth surface.

11. (Currently amended) The surgical drain of claim 10, further including a processing system configured to compare a difference between the physiological property sensed by the first, the second, the third and the fourth sensing systems elements.

12. (Currently amended) The surgical drain of claim 1, wherein the first and second sensing ~~systems~~ elements include optical fibers.

13. (Currently amended) The surgical drain of claim 1, wherein the first sensing ~~system element~~ includes a component that is affixed to the conduit.

14. (Currently amended) The surgical drain of claim 4 13, wherein the component is embedded in the conduit.

15. (Currently amended) The surgical drain of claim 4 13, wherein the component includes a sensor.

16. (Currently amended) The surgical drain of claim 4 13, wherein the component includes an optical fiber.

17. (Withdrawn) A method of utilizing a surgical drain to monitor the condition of a tissue comprising: implanting a surgical drain within a body cavity in proximity to tissue to be monitored, wherein the surgical drain includes a first sensing system and a second sensing system configured to sense a physiological property of the tissue; receiving information from the first and second sensing systems regarding the physiological property of the tissue;

monitoring the information received from the first and second sensing systems to evaluate the condition of the tissue over time.

18. (Withdrawn) The method of claim 17, comprising processing information from the first and second sensing systems to compare a difference in information sensed by the first and second sensing systems.

19. (Withdrawn) The method of claim 17, comprising processing information from the first and second sensing systems to compare a difference in information received from the first and second sensing systems from different regions along the same tissue.

20. (Withdrawn) The method of claim 17, comprising processing information from the first and second sensing systems to compare a difference in information received from the first and second sensing systems from different tissues.

21. (New) The surgical drain of claim 1, wherein the first tissue and the second tissue are part of the same organ.

22. (New) The surgical drain of claim 1, wherein the first tissue and the second tissue are not part of the same organ.

23. (New) The surgical drain of claim 1, wherein the first sensing element and the second sensing element are located on the same surface of the elongated conduit.

24. (New) The surgical drain of claim 1, wherein the first sensing element and the second sensing element are located on substantially opposing surfaces of the elongated conduit.